

343 keeping plank canoes (*mon*). Dug-outs are usually left on the
501 beach, care being taken to draw them up above high-water mark.

514 No special areas are set apart for latrines. People go into the bush, as a rule not very far away, the women keeping to the area behind their own quarters at the back of the line of huts. In the case of a shore village, the men and boys wander along the beach.

364 Some attempt is made—rather spasmodically—to keep the village
● 412 clean, each woman sweeping the area round her own hut, with a broom made of bundles of the midribs of coco-nut palm leaves, tied at one end, without a handle. One man at Kurtatchi, more inventive than the others, made a rough wooden shovel, with handle all in one piece, with which to remove pigs' dung. Different villages vary very greatly in the extent to which they are swept and cared for, and as dogs and pigs wander round freely, while everybody constantly flings down areca-nut husks, bits of coco-nut, and miscellaneous oddments, even a short period of neglect suffices to give the village a very unkempt appearance.

342 *Huts.* At Petats, and a few other villages, under the tuition of
[177] the Missions, the natives now build themselves houses raised on piles, with plank walls and high-pitched roofs (see Pl. 3 b). But in most places, especially in Bougainville, the native type of hut still predominates, built on the bare earth, thatched with sago-palm leaves in the shape of a broad gothic arch, with the roof almost touching the ground on both sides. They are all exactly alike; their appearance can be seen from the photographs. There are no windows. At each end is a very small opening (a typical one measured 21×16 in.), serving as entrance and exit, closed by having planks set across it at night or when the hut is left empty.

[439] At the present time a few natives have plank doors swung on hinges and perhaps fastened with a bolt bought at the Chinese stores. The doors are raised about 3 ft. from the ground-level, and in front of each is a sort of shelf of split areca-palm trunks, 2 or 3 ft. in width, which serves as a sitting platform or verandah, as well as
342 an aid to scrambling in and out. The end of the hut, facing the
562 dancing space, with its entrance and verandah, is called *tagoas*,
784 and is reserved for the men, women being allowed to use it only on certain ceremonial occasions. The women's place is at the back, called *babots*, including not only the back 'verandah' but all that portion of ground which adjoins the back of the huts, irregular in its outline because the larger huts project into it farther than the

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culty in the dim light of dawn. It was an occipito-anterior presentation, and apparently normal. Sighs of relief and smiles of pleasant anticipation came from all the women. 844

The child was expelled on to a piece of areca-palm sheath spread on the ground between the mother's knees. Immediately it was delivered, the woman kneeling behind Manēv pressed heavily on her abdomen with her clasped hand, and pushed out the after-birth, which was left attached to the child, the cord not being cut at this stage. The mother then stood up, and another woman tied a broad band of banana fibre tightly round her abdomen.

The child lay very still, giving no signs of life. The women looked at it and said: 'It is sick.' One said: 'It is dead.' Then one of them started to stamp with her foot on the piece of fibre on which the child lay, shaking it fairly violently. Another beat two sticks together, making as much noise as possible. I was given a stick and requested to rattle it on the floor. This was done, they told me, to frighten away the *war* who was trying to kill the child. No one attempted to touch the infant. After a while its chest heaved a little. Immediately she saw this, its grandmother, Sanasi, warned a finger and thumb at the fibre, and rubbed them along the umbilical cord, calling for a *kapi*-shell knife (black-lip oyster, [825 412] ● used by women for peeling taro, &c., see Pl. 38, No. 3). This was produced and handed to Manēv, who was told to cut the cord, which she did, holding it with one hand and cutting it with the knife held in the other hand, while Sanasi held it taut. About three inches was left attached to the child. The cord was not ligatured, and nothing was done to the cut ends, but they did not bleed much.

The grandmother then took up the child and began to shake it. Putting her finger as far as she could into its mouth, she exhorted it to cry. 'Cry loudly.' For a few moments it made no sound. She took it by the heels and swung it backwards and forwards, face downwards. Presently a very feeble little wail came from it, and then it continued to cry, but not vigorously enough to please the women, who kept on telling it to cry louder, and Sanasi kept on pushing her finger into its mouth. Some cold water was then poured over head, back, and chest out of a coco-nut. No attempt was made to cleanse the child properly. Sanasi wiped its eyes with her finger, but not very thoroughly. Its cry was now sounding more healthy.

Meanwhile, Manēv, who seemed vigorous and active, had been

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6

Kurtatchi

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stood to him in the relation of *pi'an* (cross-cousin), and as he was therefore prohibited from touching his skin, another man was specially appointed to perform the duty of putting on the paint.

They may not decorate themselves with a plant called *tsutsuir*, which is much liked by these people and is frequently worn tucked into the arm-band. This prohibition is removed after the *watawutch* ceremony.

IV. Other regulations.

In the olden days, boys wearing the *upi* were not allowed to handle edged tools. They might help to clear the bush, but all cutting was done by the *amro*. This taboo is no longer enforced.

A boy wearing the *upi* may not be beaten by anybody, no matter what his offence. Those who break this taboo will die. Specific instances were cited of people who had done so—and had died. It is permissible for two boys to fight each other, though it is difficult to imagine how they could do so effectively without first removing their head-gear.

In recent years, with the increase in the practice of going away to work for white men, another rule has been made, that the boys wearing the *upi* may not sign on as indentured labourers. For some time after putting on the hat they must not work for white men at all, but after their hair has grown to some length they can work as casuals, provided they work on a plantation near enough to their own village to enable them to return to it each night. They are not allowed to remove their *upi* while at work. After they have been through the *watawutch* they may sign on as indentured labourers and are permitted, if they wish, to remove the *upi* and tie up their hair in a bit of cloth; this is done to keep it out of the way rather than to prevent it from being seen, since the prohibition on showing it is removed at the *watawutch*.

A further complication is now caused by the boarding-schools instituted by the various missions. A boy from Ruri who went to one of these had his *upi* removed by the priest. His people were very angry, but the affair was not as bad as it might have been, because the lad had been through the *watawutch* ceremony. It was legitimized by making a feast at Ruri, to which the Kurtatchi people were invited; this brought the matter to my notice. (Incidentally, those who went said it wasn't much of a feast, there was only one pig and some taro, and they got only very little apiece!)

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239 881
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them, and women, though they do not carry them, may see them without hindrance.

THE WASIPSIP CEREMONY

The *wasipsip* is considered the least important ceremony of the three. If it is convenient for some of the boys to remove their hats at any particular time after the holding of the *watawut*, a *wasipsip* may be arranged for the benefit of a few, or even of one boy alone, if there is any special reason for doing so. Thus, for example, a boy who wishes to go and work as an indentured labourer will sometimes persuade the elders to hold a *wasipsip* for his benefit. But in the ordinary way, the boys who go through the other two ceremonies together also join for the third.

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The boys must first spend a few days, perhaps ten, in the bush. This seclusion is called *wamibit*, the same word as is applied to the seclusion before the *wapi*. They stay in the bush until noon on the day fixed for the ceremony. During this time they must not be seen by the women. Food is brought to them by the *kwigin*.

At noon they come to the village and go inside a palisade enclosing a little *tobar*, specially made, just big enough to accommodate the number of initiates involved. The inside of this *tobar* is decorated with leaves, and strings of shell money. They remain there for the remainder of that day, and sleep there that night. At dawn next day they get up, and their hair is cut off by their *amro*, with a *kina* shell (a variety of *Cyrena*, having a very sharp edge). The hair is cut quite short, and is trimmed close to the head at the back and perpendicularly at the sides. The *amro* then paint the heads of the novices with the special pattern appropriate to the removal of the *upi* (described on p. 224). All the people *kōma*, and *mabu* are blown. For the *wasipsip* it is considered enough if there are two *mabu* only.

[346]

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[412]
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The *amro* take their charges on their shoulders, just as they did in the *watawut* ceremony. No lime-pots or arca-nut boughs are carried, and the faces of the initiates are not painted as in the former ceremony. A few figures of men, women, and birds are carried round in front of them; these must be made afresh for this occasion, those used at the *watawut* having been burnt.

881
[482]

When they have been once round, the boys get down from the shoulders of the *amro*, and go to the chief *tsamun*, who gives them water in coco-nut shells. This they must really drink, not pretend

[565]

DIET, COOKING, AND MEALS

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for them to be on the road. The next day, several had to get up 251
and go down early because they had nothing to eat.

In the case of those villages which are unfortunate in not possess- 437
ing sufficient land of suitable quality for growing enough taro to
meet their requirements, the women make regular trips to trade
with the women of other villages, obtaining taro in exchange for
other commodities, chiefly fish. Details of this system of barter
will be found in Chapter XII.

The usual methods of cooking taro are either to boil it in a native 252
pot (lined with banana leaves, which also cover the top, tucked in 412 ●
over the contents), or to roast it by laying it on the embers of a 321
smouldering fire. In both cases it is first peeled or scraped (*kuiskuis*) [825]
with a knife (*nanas*) made of a black-lip oyster-shell which has been
ground down to the hard pearly surface by rubbing on rough coral
(Pl. 38, no. 3). These knives are preferred to trade knives for this
purpose; the women say the trade knives spoil the taro. Two other
kinds of shells, a conus (no. 4) and a dolium (no. 5), are occasion-
ally used instead of the black-lip oyster. Taro is also cooked in 252
a native oven (*ta'o*). When a woman wishes to make such an oven 354
(*nog a ta'o*), she first scrapes out a hollow in the ground, probably
inside the hut at the women's end of it, and then builds up a frame-
work of sticks in it, by laying in two lines of sticks and some cross-
pieces. This is then lighted from a smouldering log or the embers
of a fire; when it has flamed up she places a quantity of round
stones, about the size of a hen's egg, in the flames, and also throws
on taro parings to make it flame up well. When the wood is burnt
away and the stones are hot, water is thrown on the flames to make
them die down and to produce steam, the food to be cooked is laid
on the hot stones, and the whole is covered up with some of the hot
stones and the dirt from the floor which was displaced in making
the hole. The oven is left thus for several hours, being generally
prepared in the evening and opened up on the following morning.
When the cooked food has been taken out, the stones are carefully
put away in a corner of the hut for future use.

Taro is never eaten raw; it would be as unpalatable as our own 251
potatoes in the same state. It is liked either hot or cold, and is 262
frequently prepared beforehand, placed in a basket made of plaited 285
coco-nut leaves, and hung up in the rafters of the hut until re-
quired later in the day; it is not, however, kept for more than about
twenty-four hours.

DIET, COOKING, AND MEALS

252 The methods previously described are those of preparing taro
462 for ordinary everyday consumption, and are all in the hands of the
women. Besides these, there is another method of preparation,
which is considered of great importance. This is the making of
menak, which may be described as 'ceremonial pudding', as it is
not made as part of an ordinary meal, but only for use in a pre-
scribed manner on special occasions. The making of *menak* involves
the expenditure of a considerable amount of time and trouble.
Because of its ceremonial character, it is exclusively in the hands
of the men, women taking no share either in the preparation or in
the cooking. The method of making it is as follows: Taro tubers
in sufficient quantity are peeled and boiled. When they are soft
they are taken out of the pot, and put a few at a time into a large
flat wooden tray made for the purpose (*kōn*), and are pounded with
a wooden pounder, which is usually nothing more elaborate than
a stout stick the end of which has been carefully stripped of its
bark. If no *kōn* is available, a dish made of the stiff sheath of the
areca-palm (*kōbu*) may be used instead. While some of the men
are busy pounding, others are scraping the meat of a coco-nut
which is riper than those used for drinking, the meat being now
hard and solid. The contained liquid is thrown away, or may be
given to the pigs; at this stage it is not considered fit for human
consumption. The meat is scraped from the shell by means of
a serrated shell, fixed on to the end of a long board. Sometimes
the broad end of an old canoe-paddle is utilized for this purpose.
On one I brought home the shell is a species of cardium (see Pl. 38,
no. 9). The operator sits on this board, holding the projecting end,
fitted with its shell, between his knees. The scrapings fall into a
receptacle placed on the ground in front of him. When a large
quantity of coco-nut meat has been shredded, it is squeezed through
a piece of coco-nut fibre (*ipōits*). A liquid resembling milk is the
result, this is poured into a native pot of oval shape with a lip at
each end (*hepa*, Pl. 61a, no. 3); the usual round ones are not used
for this purpose. The pot is put on a fire and kept on the boil until
the contents become very thick. This mixture is added to the
pounded taro, mixed well by stirring, and the resulting paste is
either made into balls by rubbing between the palms (Pl. 33), or,
more often, pressed into frames made of thin lathes of wood, about
an inch wide. These frames are then made up into a rectangular
package by wrapping them in banana leaves, and are placed in an

262 of the bush, bread-fruits were to be seen lying about on the ground in large quantities in various stages of rottenness, where no one had chanced to pass that way to pick them up.

222 The bread-fruits are obtained by climbing the tree and knocking them down; those above hand reach are hooked off by jerking them
 412 from their stalks with a stick lashed, pointing backwards, on to the end of a long pole.

252 Bread-fruit is cooked by being laid on the top of a fire of sticks, directly exposed to the flames (Pl. 34). When the outer skin is completely charred, the inside is done to their liking. The blackened skin is scraped off with a black-lip oyster-shell knife, and the soft inside pulled to pieces with the fingers and eaten in great hunks.

[262] The large seeds it contains are very much relished. They may be eaten as they are, or cooked again by being laid in the embers, just as we roast chestnuts, which they strongly resemble both in look and flavour. Bread-fruit is never pounded or made into pudding.

262 Leaves eaten as vegetables. Although the taro plant is cultivated principally for the sake of the tubers, its leaves are also used as food. Other kinds of leaves, grown in the taro garden or wild in the bush, are likewise eaten, also the tender tips of some species of bracken (*Pteris*). They are prepared by being boiled in pots with

252 water, generally sea-water, or with the addition of some sea-water,
 824 for the sake of the salt. When done, they look and taste not unlike
 [263] spinach. In the mountains, where there is no pottery, they are

[323] cooked by being thrust into a length of bamboo, without water, the bamboo being then laid on the fire. As I know from experience, the resulting dish is both succulent and tasty. (I was told that pig, cut into small pieces, is also cooked in this way, but I did not see it done.) I have never seen this method of cooking in bamboo

[184] without water in use among the coast natives, where it is not necessary since they can obtain, from the women of Malasang, pots in which to boil their food.
 439

262 Nobody would deliberately cut down a coco-nut palm in order to eat its heart, but if one is blown down, or has to be removed for
 252 any reason, the heart is hacked out and eaten with great enjoyment, either raw, or, more frequently, boiled like taro, in a pot lined with leaves.

262 There is a species of seaweed which can be obtained from the
 [222] reef at low tide, which is eagerly sought for and eaten just as it comes from the reef, in spite of, or perhaps because of, its saltiness.

415 individual needs, half a coco-nut shell makes an excellent cup or bowl, leaves may be used as plates, and a shell (usually a species of cyrena, Pl. 38, no. 6) serves many of the purposes for which we use a spoon. These, with the women's knife made of black-lip oyster-shell and the large trade knives which are now universal, constitute the chief utensils employed in preparing and eating meals. 264 Fingers and teeth are the aids to feeding most in evidence.

When ready to serve, the pot with its contents is placed on the verandah, or on the ground, where every one can reach to put his hand in and pick out a chunk of taro or a handful of tiny shell-fish. These people will put their hands into water that is only just off the boil, and take out a taro so hot that when they passed me my share I invariably dropped it, till I learned to wrap a leaf round my hand before accepting it. Similarly they will plunge a hand into a potful of shell-fish immediately it has been taken off the fire. Fish that has been cooked in leaves will be laid out on the verandah, still resting on its leaf-covering; if the fish are small each person will take one or more, according to the quantity available, if large, pieces will be torn off with the fingers. Sometimes a number of cooked taro or the portions of a disjointed opossum will be passed round in a coco-nut-leaf basket. If you have taken more than you want you pass the remainder of the taro or the half-picked bone to some one else, probably one of the children, with the remark '*Komané a libul*', 'My belly is full'. I never saw any one put partly eaten food back into the pot. There are always plenty of dogs and pigs in attendance, who see to it that no fragments are left on the ground when the meal is over. 231 The pigs are specially fed with the taro peelings and any other bits accruing from the preparation of the meal, being called up by name by the housewife for this purpose. The dogs fare more meagrely, being purposely kept on short rations in order that they may be fierce in hunting.

SMOKING

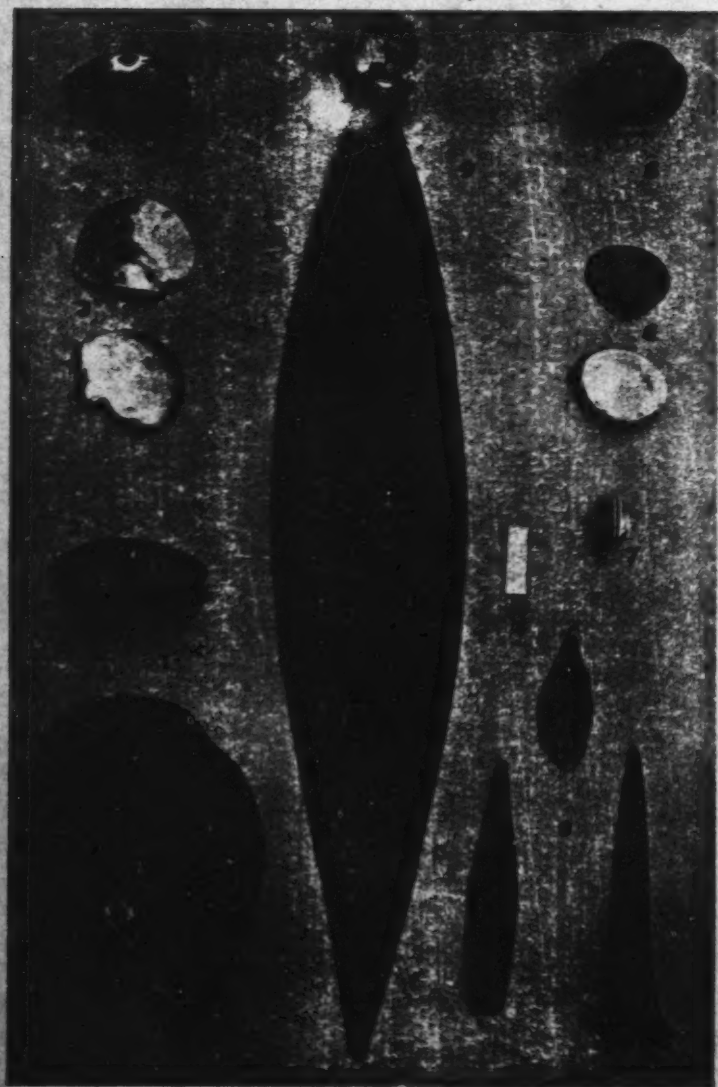
276 Smoking is universally indulged in, even by quite small children. Apart from the merest babies I do not remember meeting any one [855] who did not smoke. It is a common sight to see a little girl of perhaps five or six strutting about with a pipe in her mouth, which may or may not be alight (Pl. 37b).

249 Tobacco is grown in small quantities and cured by being hung
276 in bundles in the sun, but everybody much prefers the variety to
439

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6
Kurtatchi

PLATE 38



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415
386

SOME OBJECTS IN COMMON USE

1. Pine shell containing paint. 2. Stone for crushing paint, &c. 3. Women's
knives. 4. 5. Taro scrapers. 6. Spoons. 7. Tweezers. 8. Bone tools for making
thatch. 9. Coco-nut scraper made from canoe-paddle.

[Facing p. 292]

IX

THE FOOD QUEST

262 THE principal constituents of Melanesian diet having been discussed in the previous chapter, the present one will be devoted to a description of the methods by which this food is obtained. Since vegetable produce, and in particular the taro plant, forms by far the greatest part of the diet of these people, this will first be dealt with, followed by hunting and fishing, the means whereby flesh food is provided as a much-needed 'relish' to the vegetable diet.

HORTICULTURE

244 Horticultural activities centre mainly round the provision of
242 a sufficient crop of taro for their daily needs, with an excess at certain times for use at ceremonial feasts. This is by no means an easy task. Taro makes heavy demands on the soil, so that in the absence of any knowledge of fertilizers or of the principle of rotation of crops, a patch which has produced a crop of taro cannot be used again till it has had time to recover. In the case of the large taro garden near Kurtatchi, I was told that this particular patch was last cleared by men who used stone axes, long before the oldest men in the village were born, and that it will not be used again till the sons of the present generation of babies are grown men. I suppose that this practice must, at some time or other, have been adopted as the result of experience. At any rate, they know that if you plant again in the same garden too soon the taro will be small and will not grow well.

The result of this policy is that the men and boys must see to it that fresh patches of cleared ground are always ready for the women to replant the stalks of the tubers they take out daily for their household needs. It is not always realized, I think, how large an area of land a primitive community needs to support itself, even if not nomadic. At present the inhabitants of this region have plenty of land at their disposal for the necessary shifting of their gardens, though even now gardens are often several miles from the village to which they belong. But if there should arise in the future any

THE FOOD QUEST

301

workers often erect temporary shelters (*tanti*) of banana leaves on the spot and remain there for weeks at a time, thus saving themselves the long walk to the garden in the morning and back again at night. They bring down a minimum of household goods, a sleeping-plank and a cooking-pot, and often do not trouble to construct more than a roof and a back to their shelter. 244
343

In the olden days, when stone implements were the only tools available, large trees were brought down by burning them at their base. Now that trade axes and knives can be obtained the trees are felled a few feet from the roots, leaving the stumps standing. Trees with a food value, such as canarium almonds, are always spared. The undergrowth is cut down and left lying where it falls till it is dry; eventually it is made into large heaps and burned, except for the thick stems of the bush banana plants which contain so much moisture that they will not burn. These are arranged in orderly piles, kept in place by stakes on each side, and left to rot. 412 •
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In the ordinary way taro is planted as a routine matter without any ceremonial attaching to the operation. But there are certain 'medicines' which may be used if desired. Some of these are the sole prerogative of the women, some may be used by both sexes. I have a considerable number of these 'prescriptions' in my collection, some of the more interesting run as follows: 244
324
[562]

Burustē (*Eranthemum* sp.).

Chew scrapings from the roots of this plant with the betel-mixture, spit on hand, rub shell-knife with which taro stalk is trimmed before planting, and knife (trade) with which ground is weeded. Rub also on taro. Your taro will be good when other people's is bad. Used only by women. [562]

Magor (a mixture, described on p. 475).

Chew some *magor* with betel-mixture. Spit it on to a piece of stick which grew in the taro garden, then spit on the cut end of the stalks that are to be planted, and say: '*Ar wapas nor ā mā so nuts t'an.*' 'You and I spit on the taro, now it is large.' Used only by women. [562]

Tfiah (plant unidentified).

Chew roots with *magor* and betel-mixture. Spit on hand, rub on stalk of taro before planting. After doing this a man must not go fishing, and a woman must not go to the shore or hunt for shell-fish on the reef. If this prohibition is not kept the taro leaves will shrivel and dry up. The time during which it is observed was not to be ascertained.

THE FOOD QUEST

244 with jagged red and yellow leaves, which is always planted in the
824 taro garden and is supposed to have the effect of making the taro
796 grow well. Cordyline plants are frequently put there also for the
same purpose.

244 Meanwhile the men were cutting poles about 4 to 5 feet long,
796 scraping off the bark top and bottom, and sharpening one end.
These are called *isō* and are used to make the holes in which the
taro stalks are planted. They form the only actual agricultural
implement used in this district, since the trade knives used for
clearing bush and weeding serve also a multitude of other purposes.
When each man had been provided with one of these the men all
went off to the new garden and put up a shelter in the middle of it,
over part of the path which ran down its whole length. The shelter
consisted merely of poles stuck in the ground with a layer of banana
leaves laid across them, but it served to shade a small patch of
ground where the *ōto* (medicine) could be prepared, and where
food could be eaten away from the heat of the sun. The large
packet of ceremonial pudding was laid under this shelter, together
with bundles of leaves required for the 'medicine'. The food was
consumed at intervals in the course of the day's work.

244 Pinari had gone off in the early morning to look for some special
796 leaves in the bush. When he returned, all the men, but no women
[562]—except myself, by special invitation—collected round the shelter.
The women remained outside the garden, beside the heaps of
taro stalks.

[415] One of the men made a receptacle (*kōbū*) by twisting up and
244 tying the ends of the thick fibrous sheath of the areca-palm. This
796 he handed to Pinari, who put inside it an old *kōbū* containing a
mixture of red dust and scraps of dried leaves. This mixture was
not prepared on the spot, it had been obtained a long time ago
from an ancestor of Pinari's living at another village, and is very
highly valued. It is kept in Pinari's chief hut, and had been brought
down, carefully wrapped in banana leaves, earlier in the morning.
The mixture is called *tama'uy*. Pinari knows how to make it, but
he would have to obtain some of the materials from a distance.
[868] Before he dies he will teach the secret to his sons. He told me
later that the mixture consisted of scrapings from the roots and
leaves of a number of plants, which I was not able to identify,
some of them not found locally. These are mixed with a quantity
of *magor*. The mixture thus prepared is kept for use as required,

USEFUL ARTS

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travellers, beginning with Mendaña, showing that they undoubtedly did so, and, as mentioned in the previous paragraph, the Petats people were doing so not very long ago. It is interesting to note that the Kurtatchi people, who apparently learnt the method of manufacture after the introduction of white men's tools, said most emphatically that it would be impossible to make them without. Nowadays, the tools employed include axes, metal adzes, gimlets, augurs, sometimes a brace and bit, and occasionally a plane. In the absence of a brace and bit, pieces of wire or nails, which can be obtained from the Chinese stores, are heated and the requisite holes are burned with them. 396
[412] 177
[439]

For the main planks of the *mon* a tree called *panots* (the same as that employed for rafts) is used. A large tree will provide five or six planks for a medium-sized *mon*. The tough outer skin of *Lygodium dichotomum* (*asam*) is used for binding them together, and the seams are caulked with *Parinarium laurinum* (*atsit*), the 'putty nut'. 396
824

Method of construction. The technique employed in the manufacture of *mon* in this area differs very considerably from that practised in the British Solomons as described by Ivens (1927, pp. 149 ff.) and Woodford (1922, pp. 508 ff.), as does also the appearance of the canoe when finished. I watched the procedure both at Petats and at Kurtatchi, but as I did not see the early stages at Petats, I take the description which follows from my Kurtatchi note-book, and shall use the Kurtatchi terms. The Petats terms are given by Friederici (1912, p. 290), who does not, however, give details of the construction. 396

The first business is to cut the planks. Those for the bottom of the *mon* are about 6 inches wide in the middle, and are tapered off to points at each end. They are planed with an adze (*twarar*) to a thickness of $\frac{1}{2}$ to $\frac{3}{4}$ inch. The outside of each plank is charred by being held over a fire of chips (Pl. 50a). It is then rubbed smooth in the sand, and 'set' by being dipped in the sea. This is said to make the planks seaworthy, 'the same as tar', as one man said. (The men who have worked on plantations have seen white men tarring their boats.)

There is no sharp keel. The plank (*watén*) which forms the middle of the bottom of the *mon* is laid on the ground, and a plank (*pal*) is placed on either side of it. The adjacent edges of both, which have been bevelled slightly, are then pierced by a row of

501 this form of craft is known, *mon*. Like the dug-out, it appears not to be indigenous. The first place in this region to make such canoes seems, if the native accounts are to be trusted, to have been the Lontis coast, on the north-west of Buka, since the Petats people and the inhabitants of the villages on the coast of Bougainville all say that they learnt the art of making them from the men of Lontis.

501 In certain portions of this latter area the natives still remain ignorant of it. The people of Tiop, an island just round the north-east corner of Bougainville, told me that they had no *mon* and did not know how to make them, and I was given to understand that the people farther down the east coast had none either, though I had no opportunity of verifying this statement personally. Friederici (1912, p. 303) saw them at Teperoi, near Numanuma, still farther down the east coast. At the other corner of the north coast of Bougainville the people of the Saposa islands certainly do not make them, and they account for their ignorance by saying that Morena, who taught them all their crafts (see p. 39), did not teach them

[438] how to make *mon*, saying that when they wanted any they could buy them from Lontis or Hanahan, and must pay for them with spears and ceremonial currency. The people of Kurtatchi and the

[177] neighbouring villages were unanimous in saying that such boats were not made by them until after the introduction of white men's tools, which are largely employed in their manufacture. The

● [412] Petats people, however, say that their fathers used to make *mon* with stone tools, and to use a sharply pointed shell for boring the necessary holes by means of which the planks are fixed together.

501 Friederici (1912, p. 292) derives the Buka *mon*, on the evidence of similarity of technical construction, from the *orembai* of the
177 Moluccas. He gives a comparative list of terms for the different
174 portions of its complex structure which, he says, is sufficient to prove with absolute certainty that the *mon*, with its name, came from the east and north coasts of Buka by way of Nissan, Anir, and Tanga to South New Mecklenburg (the present New Ireland) (pp. 290 ff.).

391 *Material and tools.* C. M. Woodford, in his account of the canoes of the British Solomon Islands (1922, p. 508), pertinently remarks: 'It is difficult to understand how the natives were able, before they became acquainted with iron tools, to adze down the canoe planks to the requisite degree of thinness and shape them with the aid only of stone implements.' But he cites the evidence of the early

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The two large planks (*warin*) which are to form the sides of the canoe are then trimmed, also with ledges at either end. Ledges are also left in the appropriate positions for fixing the seats. These ledges are called *kutē*. They are not disconnected cleats, but ridges all of one piece with the plank. The *warin* are about 12 inches wide in the middle. Several men hold one of the *warin* against the side of the canoe while others mark, with a piece of charred wood, the places where the ledges are to be left, at a certain distance from the end of the canoe. Sometimes each *warin* is measured against the canoe, sometimes only one is thus held, the other being laid on top of it on the ground and marked to correspond. [804] 396

The top edge of the *bātawa* and the bottom edge of the *warin* are bevelled thin with an adze, or with a knife held like a plane. This is done after the outside has been charred, so that there is a white line running along the length of the canoe at the place where the two planks are joined. The holes for the *asam* ties are made about half an inch from the edge, at intervals of about 3 inches, the length of the worker's index finger, which he uses as a gauge. They were made, in the case of the canoes whose manufacture I watched, with a bit of pointed wire set into a wooden handle. Some of these implements consisted of large nails ground down to the appropriate thickness. Four people were engaged in boring the holes in the *bātawa*, two on each side. The *warin* are then held in position, almost at right angles to the *bātawa*, which, when released from the supporting sticks, curve only very slightly upwards from the flat plane in which all five of the original planks had been fixed. Holes are made in the *warin* corresponding in position to those in the *bātawa*. The *warin* are fixed on both sides of the canoe simultaneously, several men holding them in place, one on each side making the holes, and another tying each pair of holes with *asam* as soon as they are ready. The method of fastening is the same as that used for the other planks which I have previously described. Another row of *bēbēkil* is fixed at each end of the canoe, just above the first row. The ends of the canoe are bound round with *asam*, which is twisted round several times and fixed in a notch cut in the end of the *warin*, threaded through a hole in the end-keel (*lamut*), and pulled tight. This lashing is subsequently covered up with a liberal application of 'putty'. [412] [804] [284]

When all the ties joining the *bātawa* to the *warin* have been

342 of the *toan*, and every one manifests great anxiety till they are pronounced suitably placed (Pl. 55 b).

[824] Thin, flexible strips of the wood of a tree called *ariho* are prepared; the upper end of each is split and inserted into a second strip, forming an arch. This arch is lifted by a man at each end of it and fitted over the *pa'i*, so that the apex of the arch, formed by the crossed split ends, rests on the ridge-pole (Pl. 56 a). These form the rafters (*wahoal* or *tartaras*) to which the thatch is to be fixed. They are tied firmly to the top of the *oror*. After a single pair has been put on in front, another at the back, and one at the level of each row of house-posts, the others are put on in groups of ten or more. Laths (*papom*) are then laid along the length of the house, and each of these rafters is tied to every lath separately, where they cross each other, by means of a tough fibre taken from the inner bark of a tree called *ripto*. The fibre is passed over the top, up from below, and over the top again, the ends being tucked under. A large house will have six laths on each side. The one nearest the ridge-pole is fixed first, then the next below it, and so on. The lowest one has to hold the lower ends of the rafters down over the edge of the walls; it is difficult to fix owing to the amount of spring in the rafters, which are held taut with logs rolled against their free ends while they are being tied on to the lowest pair of laths a little higher up. The ends are left projecting, but are cut straight, leaving enough to overlap the walls about 6 inches. Another *pa'i* is laid upon the crossed ends of the rafters where they rest upon the ridge-pole, and tied down to it by fibre twisted round between the rafters. This is finally covered by a piece of bark or by a matting made by plaiting together the fronds of two coco-nut palm leaves, forming the apex of the roof.

[824] The house is now ready to be thatched. The thatch is made of the leaves of the sago palm. In some places, where sago palm is scarce, the long, narrow leaves of a species of river reed (*manob*) are used instead. The sago-palm leaves are brought to the village tied in great bundles. When required for use, the mid-rib is first removed, and leaves are then folded over a long strip of bamboo, generally two, sometimes three, together. A slit is then made through all the layers just below the cane by means of a pointed implement made of the bone of a porpoise or a dugong. These are preferred to European knives, which are liable to split the leaves too far. Holding open the slit by means of the same im-

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occasionally. They are by this time bleached to a pale greenish-grey, which goes yellow with use.

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In the finished hood, sections of these leaves, left in this state, alternate with sections covered over with the leaves of another plant, coloured red. The dye is made of the roots of the tree *rivo* (*Morinda citrifolia*), which are first washed in the sea, then crushed on a stone, and then boiled. After they have boiled for a long time the water is drained off and the leaves dipped in it. The dye is not permanent, but fades in a few weeks. These leaves are not rolled up like the pandanus leaves, but are folded, and then hung up to dry in the shade.

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When making the hood a woman starts with one leaf doubled. Another leaf is then sewn on to one side, and a third to the other side. They now use needles, but formerly made holes with a sharp fragment of shell and threaded the fibre through them. The thread is made in the same way as a man makes a fish line, by rolling on the thigh. Each worker makes her own as she needs it. It is made from the fibrous inner sheath of the stem of a creeper (*lok* in the Petats dialect, not the same one as is used for making string at Kurtatchi as described on p. 342). The leaves are joined with a running stitch; when it is finished the work is turned over and the join pressed out. When a piece of the required length has been made, it is put aside till another is finished. The two are then fastened together along the two long sides, a piece of thread being laid along the edge of each, and the joining stitches passing over and over it, showing on both sides. Or one length may be made, twice as long as the hood is intended to be, and doubled so that the doubled edge has no sewing. The worker is now handling a flat piece of material consisting of two layers of leaves, sewn together, the whole being about 2 feet broad and varying in length from 2 to 3 feet or more. Some women like their hood to come just over their shoulders, some wear it hanging almost to the ground.

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The hood is then completed by being doubled and joined at the top with stitches in a wavy line (Pl. 62a). Some women are very skilful in ornamenting the leaves with a pattern of stitches made with flat strips of fibre dyed red and black, but most hoods are left plain, except for the red leaves, which are stitched on over the others when the two layers are joined up.

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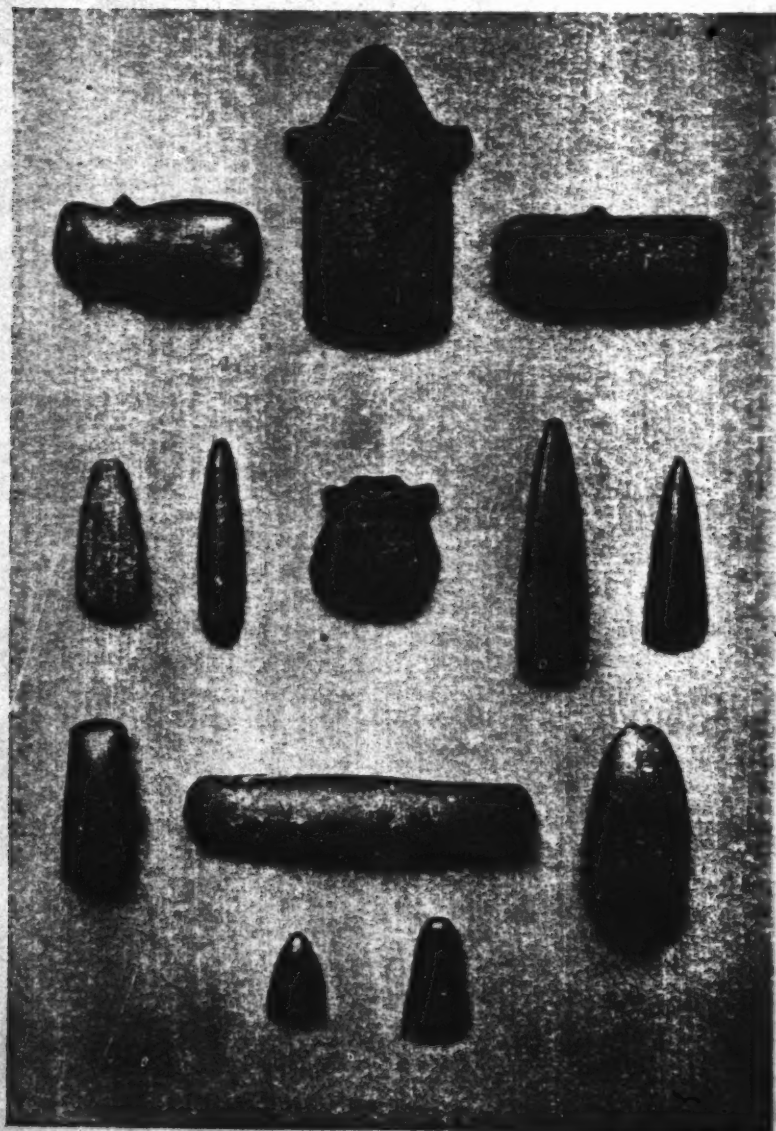
The Petats women make large numbers of these hoods, and trade them to the people of the hill villages of Buka and to the

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6
Kurtatchi

PLATE 63

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SOME TYPICAL STONE IMPLEMENTS

[facing p 403]

- 285 them. The result is a basket with a very open mesh, with the holes
 [184] in the shape of large polygons in even rows. It is called *amat* in
 the Petats dialect. I did not see anything of this kind at Kurtatchi.

Plaiting, done by both sexes.

- 285 A third kind of basket is made by both men and women, by the
 415 simple method of taking a length of the leaf of the coco-nut palm,
 cut to the size required, splitting its mid-rib to form the brim, and
 plaiting the fronds together for the sides (Pl. 62a). The bottom
 consists of the ends of the plaited fronds knotted together. These
 baskets are intended for temporary use only, and are thrown away
 when done with. The women use them chiefly for putting cooked
 taro ready in the rafters or other convenient place so that members
 of the family can help themselves when they are hungry. The men
 use them to carry their pipes, tobacco, and the ingredients for
 chewing the betel-mixture. For this purpose the men make them
 with a hole in the middle of each side, near the top, through which
 they thrust their hands and wrists, for convenience in carrying.

- 342 The fronds of coco-nut palm leaves are also plaited together to
 make a covering for the ridge-pole of the huts, to block an opening,
 or to make a partition or a screen from the wind. The fronds on the
 left side of one leaf and the right side of another are stripped off,
 the leaves laid side by side with the sides on which the fronds still
 remain turned towards each other. The mid-ribs, laid bare on the
 other side, then form the outer edges of the matting, which is made
 by intertwining the fronds of one leaf with the fronds of the other
 (Pl. 62b). If a very wide piece of plaiting is required, three leaves
 may be used, the fronds on both sides of the extra one being inter-
 twined with those of the two others, which are placed one on each
 side of it, the edges of the finished article being formed of the mid-
 rib of the outer ones.

NOTE ON STONE IMPLEMENTS

- 412 The stone implements of the olden days have now been entirely
 324 superseded by trade knives, axes, and adzes, which can be obtained
 171 from the planters' stores, or are brought back by men returning
 from indentured labour at Rabaul or elsewhere. But the use of
 these latter has been general only for about two generations, and
 numerous specimens of stone implements are still lying about the
 villages, some being used to grind the blades of their modern

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equivalents, others to crack nuts, or as weights, &c. The people know very well what they are, though I do not think any one now living has actually used them. They affect to despise their forefathers for using such awkward tools, but they admit that they themselves could not do with stone axes the work their forefathers did.

The only legend of origin in my collection referring to these stone implements comes from Saposa, where it is said that Morena gave them to the people when she taught the other crafts, teaching them at the same time to make more for themselves, and to make them also of the shells of the small clam and the giant clam.

The most typical shapes can be seen from the photograph (Pl. 63). The usual material is of a volcanic nature, such as is to be obtained in the centre of the island. They are called simply by the generic word for 'stone', *zako* in the Petats dialect and *wats* or *watf* in the Kurtatchi dialect; sometimes *wats pa ta kana*—'stone of times past'. I do not know of any special names applied to the different shapes, but as these differences have no longer any significance probably any such names as once existed are now forgotten.

At Petats I saw a few specimens of stone pestles (*akon*) similar to the larger of the two examples figured by Parkinson (1907, p. 498, Fig. 79). These are still used for cracking almonds; but the people say that they are too lazy to make them nowadays, but use any heavy stone instead.

I saw no hafted stone implements in Buka or North Bougainville, but in the Kunua mountain district of west-central Bougainville some are still to be seen, hafted with cane like those figured by Parkinson on p. 501 (Fig. 81). They are still valued by the people of the interior and form part of the ceremonial payments made in respect of a wife. When not required they are kept carefully wrapped up in fibre tied round with native string and packed away in the rafters or other place of safe-keeping.

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AESTHETIC ARTS

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PERSONAL ADORNMENT

Most of these people take great delight in decorating themselves with ornaments, paint, and flowers, even when nothing special is going on. A few are careless, and can hardly be induced to trim their hair even for an important ceremony; these are the subject of comment on the part of the others, whatever their age or sex. On the whole, the women appear to take less trouble over their personal appearance than do the men; they certainly make less fuss about it. Some of the men—not only the young ones—spend a good deal of time in trimming and putting paint on their hair, carving themselves combs out of bamboo (Pl. 67, no. 9), and searching for aromatic leaves to wear in their armlets or round their necks. [412]

Hair-dressing.

The method of dressing the hair most generally favoured for special occasions is to trim it rather close at the back, and very close at the sides, leaving a small triangular patch just in front of the ears. This cut accentuates the straightness of the sides and back of the head, which is much admired. The general effect is imitated in the wooden figures made for certain ceremonies (see p. 236 and Pl. 28). This method of hair-cutting is called *tširkë*. Red, black, or yellow paint may be used in conjunction with it. Though almost obligatory on special occasions, it may be worn at any time at the wish of the individual. Round the temples and across the forehead the hair is trimmed to this shape . To trim it thus is called *genomola*. The line of white paint which usually follows the edge of the hair is called *wakai*, to put it on is *wakamola*. The *wakai* line may not be used by boys wearing the *upi*, until the time of the *watawut* ceremony, when it is put on them at a certain stage in the proceedings.

On special occasions a pattern of black and red (*usboy*) is painted on the hair, according to the clan of the individual. Those belonging to the Naboin clan paint the sides black with a broad band of red in the centre, passing from front to back. Those of the Nakarib clan have the side bands red and the centre black. 614

The face is painted according to individual taste. A splash of bright red covering one ear and another round the eye on the other side, or one broad line going right across, gives a striking effect 302

302 from the standpoint of the unaccustomed observer. Other designs seen at various times included smears of red or white round the eyes, a series of white lines across the forehead or obliquely across the cheeks, lines of red dots, &c.

[751] Some of this painting has more than a decorative purpose, e.g.
[484] a spot of red is put on each temple when starting on a journey, as a protection against the dangers of the road.

302 Children's heads are usually kept covered with a mixture of *oin*
856 and coco-nut oil, even if there is no ceremony going on. This is said to make the hair grow and to keep off lice. Some children have their hair rolled into little blobs with a mixture of *oin* and clay.

302 At Baniu, a village about ten miles east of Kurtatchi, and a few
184 villages farther east of it, but not—at least not now—as far as Tiop
856 on the extreme north-eastern corner, a custom obtains of cutting very short the hair on the front half of the children's heads, and letting the back half grow long. This is done for both sexes. The front half is cut, at a feast, when the child is very small, perhaps two or three years old; the back half remains long for some years more, and is finally cut at a special feast, where the child is given pig to eat for the first time. The reason given to me for this method of hair-dressing is that it makes the child grow strong and healthy. My friends of Kurtatchi said it had never been done in their neighbourhood, although the two districts are in intimate and friendly connexion.

302 The father of a boy wearing the *upi* will often let his hair grow
593 long and wear it tied into a bunch at the top of his head (see Pl. 52). This is done because the boy may not cut his own hair; it also shows pride in him. His mother may refrain from cutting her hair short at the temples for the same reason, but does not wear it on the top of her head.

302 A widow may not cut her hair, but makes it into blobs with clay,
581 without paint, which is forbidden her until a certain stage of the
765 mourning is ended.

302 Hair is cut with a sharp-edged shell, usually a species of *Cyrena*,
or, nowadays, with a bit of glass, except in the case of those few
[412] returned labourers who possess razors or scissors. These lucky
177 ones will often be requested to use their acquisitions on the heads of their friends. Cutting is done in the village, usually on the women's verandah. No special attention is given to the disposal of the ends, which are either thrown away among the other rubbish

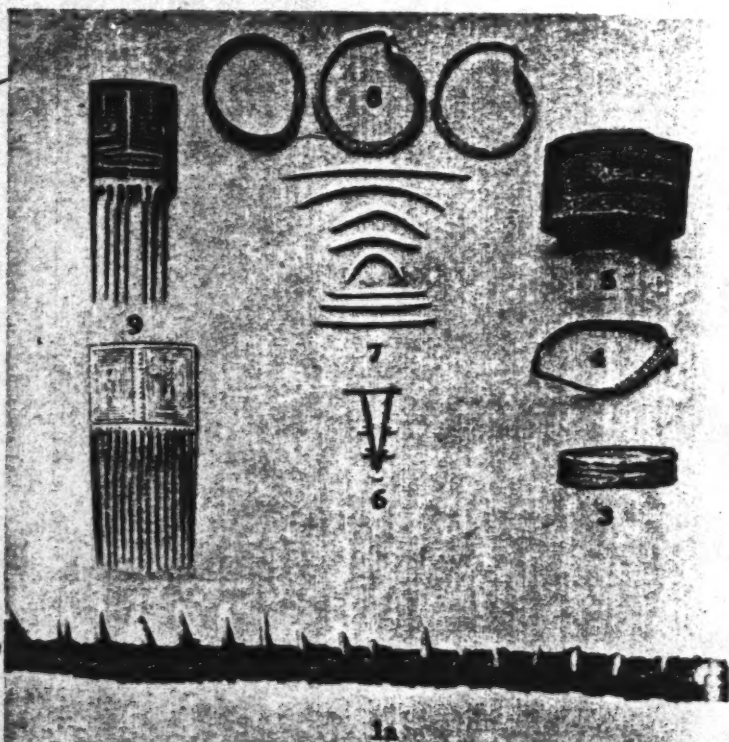
1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6

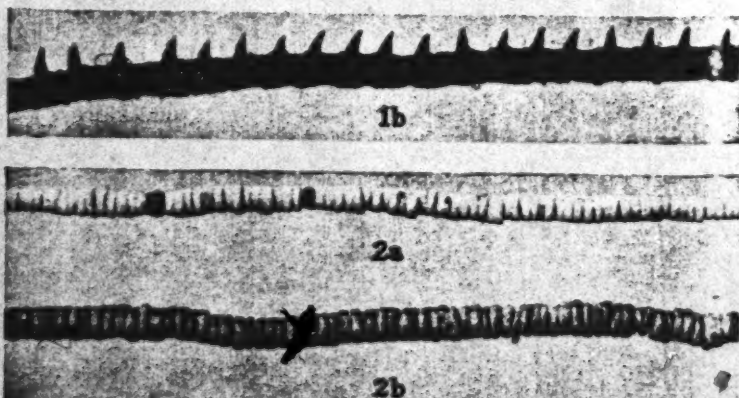
Kurtatchi

PLATE 67

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PERSONAL ORNAMENTS AND CEREMONIAL CURRENCY

- 1a. *Imun* of porpoise teeth. 1b. *Imun* of flying-fox teeth. 2a. White *deroon*.
2b. Purple *deroon*. 3. Expanding armlet of pandanus leaf. 4. Armlet of plaited
grass. 5. Armlet of dyed fibre, from Kunus. 6. Ear ornament. 7. Nose orna-
ments. 8. Armlets of trochus shell. 9. Bamboo combs.

Nos. 1a, 1b, 2a, 2b, are reproduced actual size.

[facing p. 421]

30/ wings are torn off and fixed one on each side of the head (Pl. 66b).
 [824] Dabs of a phosphorescent fungus are put on the face for special occasions, and may also decorate the ends of *mabu* or *piu*.

[789] Necklaces of aromatic plants are often worn. These may have more than an ornamental value, since many of them are regarded as 'medicine' useful in love magic or to ward off the *war*. More permanent necklaces are made of opossum teeth, threaded on fibre through small holes made in one end of the tooth. I have seen these
 ● [412
 177] holes being pierced with a primitive rotary drill, but was told that this had been learned from elsewhere by people working as plantation labourers, and that no means of piercing the teeth were known before they became acquainted with this drill. At the present time many possess necklaces of trade beads, either with or without opossum-teeth interpolated. Only very small coloured beads are liked. Some necklaces of larger beads which I brought with me as presents, because they had been very successful among the American Indians, were of little use because they were considered too heavy. Strings of small beads are also worn round the wrist, and put round the waists of infants. I do not remember seeing any native form of finger-ring.

Arm-bands (*pog*) made of plaited fibre in patterns of red, black, and yellow are almost universally worn. They are not made locally, but are obtained from the hill people (see Pl. 67, no. 5). Less elaborate arm-bands are made by plaiting grass (no. 4) or strips
 [887] of sago-palm leaves (*pog a tã*) (no. 3); the old men spend their leisure time making these. They are of different widths up to over an inch. Arm-bands serve as receptacles for any small articles they may wish to carry about with them, such as a pipe or a stick of tobacco. Here and there, especially at ceremonies, one may see a native wearing bands of trochus shell such as are common in other parts of Melanesia, but they are exceptional and are not made in this area (Pl. 67, no. 8).

The most highly prized ornament is the *piriv*, a disk of clam-shell with a fine piece of tortoise-shell filigree work superposed upon it (Pl. 68). These are worn as pendants, on ceremonial occasions only. In the olden days they were also worn by warriors setting out to a fight. A few are still made, a knife being used instead of the piece of sharp-edged shell formerly employed for the carving; but the present workmanship is careless and the patterns comparatively uninteresting. To save the trouble of rubbing down the hard hinge

224 all the people who participated in the hunt; they are cut up and divided equally; each man then takes his own share home. If he so desires, the *tsunaun tsan* can claim a portion for himself, whether or no he was present at the hunt. If a large number of pigs are wanted for a special feast, wild pigs thus caught are kept alive till wanted, when they are put into the common stock of food.

[565] 231 Domestic pigs are killed only on ceremonial occasions. The day when this will inevitably happen is anticipated with mixed feelings by their owners, pride in being able to furnish the contribution required of them being tempered by grief at the loss of a pet. No one, however, would ever refuse to part with his pig when occasion required. Domestic pigs only, never wild ones, are used in economic and ceremonial transactions. Many of these have been noted in their appropriate context.

Other possessions.

231 Dogs are much valued as personal possessions.¹ A good hunting dog is greatly prized by its owner and coveted by others. They are bought and sold, but never form part of a ceremonial payment as pigs do. One day four men came to Kurtatchi on their way back to a mountain village; they bought a dog from Pinari for which they paid him 10s. in shillings. They carried it away with them, its legs tied with strips of bark, and its mouth and eyes covered with half a coco-nut shell put on like a muzzle, a hole having been cut through which the dog could breathe.

422 Canoes are owned by the men, but their families may use them.

562 A woman does not own a canoe unless her husband is dead, then she may take his. While he is alive she will ask his permission when she wishes to use it, and if he wants it himself he will go to another man and borrow one for her.

422 For the rest, the men have their fishing-nets, and other apparatus, pig-spears, musical instruments, &c.; some still cling to war spears, clubs, and ornamented arrows of the olden days, which they carry now on ceremonial occasions only. The women all possess black-lip oyster-shell knives, which they make by grinding down the shell on lumps of rough coral; *Asa*, and banana-fibre straps for carrying burdens on the back; cleaned-out coco-nuts for holding

[552] ¹ Dogs are given names of the same kind as those given to pigs. One, for example, was called *Pati*, because the rest of the litter died, and it was thought that by and by he would die too (*pati tomer in*).

SOME ECONOMIC MATTERS

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water; cooking pots, bought from Malasang; and such baskets as they choose to make. Each woman also owns a hood for observing the rules of avoidance. Both sexes cherish their woven armlets, necklaces, and other ornaments, their pipes, and their decorated lime-pots, though these are now giving place to tins obtained from the white man. Most people now possess trade knives for cutting bush, weeding, &c., and some few also axes and adzes. This makes no claim to be an exhaustive list of personal possessions, but it does, I think, include the bulk of them. Although these people take pleasure in ownership, and are as delighted as children at the acquisition of, say, a specially large or good knife (I have seen a man doing a dance of joy at one which I had given him) or a string of beads, they do not seem to strive particularly to amass quantities of possessions, beyond what they need for their own use. 'Riches' consist of ceremonial currency and pigs, everything else is incidental. Ornamented spears used to rank in this category, and still do in the central mountain districts, there forming part of the transactions connected with marriage, as do also stone axes, which are no longer valued in the coastal districts.

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[412]422
556*Records of possessions.*

To keep a record of the number of coco-nut trees owned by the inhabitants of the village, bundles of the stiff centre rib of the coco-nut leaf frond are kept, containing one rib for each tree. A tally of pigs is kept by making notches on a stick. All the pigs belonging to the village are recorded—or are supposed to be recorded—on one stick, but this does not mean that they are communally owned. These records are required by the Government and the bundles and sticks are given to the District Officer at his official visit. I do not think any record would be kept except for this requirement, and its accuracy is open to considerable doubt.

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ATTITUDE TO THEFT

To steal ceremonial currency made of teeth (*imun*) is a major offence, one of the two such offences recognized by these people, the other being to take another man's wife, for which the same word (*a mot*) is used. The customary punishment is that the convicted person shall be taken to the beach and all who wish shall have the right to shoot at him with spears and arrows. He is,

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rare: the empty beer bottles of the Europeans are easily available and full 415
fill the same purpose. 171

Sharpened mollusk shells and bones were formerly in common use as 412
knives and scrapers, but today they are to be found only in the inland vil-
lages. On the coast and on the small islands the knife is now in general use.

In north Bougainville and Buka and here and there even in south 415
Bougainville one finds utensils (several in every village) which are used for
pulverizing various cooked tubers. The instrument consists of a conical
wooden block -- about 1 meter high -- whose point is inserted about 25
centimeters deep into the ground. The outer sides are sometimes decorated [531]
with bas relief carvings and painted; the upper rim projects slightly, and
at the bottom, about 25 centimeters from the tip, an embossed ring is
carved. The inverted base of the cone is 20 to 30 centimeters in diameter.
The inner part is hollowed out so that the whole thing resembles a large
wooden jug. Cooked taro and yam roots are put into this container and [252]
crushed to a thick mush with the stick that is about a meter and a half long;
in Buka this instrument is called maromo, and in Shortland tagoro.

Another household utensil that is characteristic for the north consists
of a circular board of about 50 to 75 centimeters diameter with a carved
embossed rim and two diametrically opposite handles. This plate is used
for pulverizing kanari nuts, which are crushed and pulverized on it with 412
a stone pestle. These pestles vary in size and weight; most of them are 415
15 to 20 centimeters in diameter on the slightly convex pounding surface.
The pestle itself is conical, and at the top it ends in a handle with a knob
or with a somewhat projecting edge. A few specimens are carefully
polished; in my collection there is an especially well-made specimen,
which has been polished completely smooth. The lower part of the pestle
is circular with a diameter of 9 1/2 centimeters; at a height of 12 1/2 centi-
meters the sides flare slightly upward; then there follows the 9 centimeter
long handle, which is decorated at the top with a conical knob that projects
on every side about 1 centimeter. In Buka the wooden plate is called
marara and the stone pestle kukono.

In the village of Toborol on the east coast of Bougainville, after an 415
expedition into mountain villages in the year 1896, a feast was prepared 171
for me upon my return. It does not deserve mention for its culinary ac-
complishments, but because here I found a number of woven dishes and
baskets being used to serve the meal, which otherwise I had seen nowhere
in Bougainville. Three characteristic shapes were represented. First, round
dishes were used to pile cooked fish on. These dishes had a base of 40 to

60 centimeters in diameter, and around this was an obliquely projecting rim -- 10 to 15 centimeters wide -- which was pierced by 4 to 6 triangular holes. This sort of shallow dish was called dara. The second type of dish was conical in shape; the flat round base was about 15 centimeters in diameter and the mouth 60 centimeters. The sides were about 40 centimeters high, curved gently inward, and provided with four triangular holes beneath the rim. In the bottom there was small diamond-shaped opening of about 1 centimeter in length on each side, probably to drain the fluid that collected in the dish. Pots of this form were called doado; they were filled with boiled and baked taros and yams. The triangular holes along the rim serve as handles when it is being carried. The third type--the handle basket--has the name koko. There were two different types of these baskets: some had a flat oval base, and the erect rim was pressed together at the sides and provided with a woven handle about 4 centimeters wide and 20 centimeters high; others consisted of a round plate whose sides were curved upward and connected with a handle. These baskets were also used for serving various dishes. The method of production is the same as is found in New Guinea, New Pomerania, and the Admiralty Islands. A strip of a tough variety of liana about 3 to 4 millimeters in diameter is sewed to another with 1 to 1 1/2 millimeter wide fiber threads. The strips are connected in pairs by coiling the thread around them. [derart dass die Windungen aus der ersteren paarweise untereinander durch Umwicklung verbunden werden.] Otherwise people use the usual simple baskets woven of coconut leaves.

[25]

Tools

We will begin with the stone axes, which can also be counted among the weapons. Nowadays they are no longer in general use. In the interior of Bougainville I found them being used as late as 1896, and here they will possibly continue in use for a short time; in Nissan, Buka. in the coastal regions of Bougainville and on the Shortland Islands they now belong to the implements of the past.

Several years ago my attention was directed to these axes by a few specimens that were brought from Nissan and, with respect to shape, deviated significantly from the normal shape of primitive ax blades. I am publishing my investigations in detail in order to show how, step by

step, I attained a clear picture of these interesting implements, and partially also in order to show that it is not always so very easy to obtain reliable information. 411 412

The specimens from Nissan had been shown to me when people were 171 on the point of packing them up and sending them to Berlin. At the beginning of 1895 I came to Buka and made it my business to search for stone axes. At first nobody seemed to know about such objects, but finally--after urgent questioning and after I had sketched a Nissan stone ax from memory and offered a large reward--I succeeded in bringing an ax blade to light. Enticed by the reward I had offered the islanders now began searching, and I succeeded in collecting a number of Buka ax blades; they are exactly like the ax blades from Nissan, which probably originally came from Buka, since Nissan is a raised coral island and affords no material for the making of the blades. All of these specimens, however, I received without the original binding, so that at first I was in doubt as to what that might be. They are of varying size, and the following description refers to a particularly well-preserved specimen: the entire length amounts to 21.5 centimeters; both ends are sharpened, and each cutting edge is 7 centimeters wide; in the middle the ax is 9 centimeters wide and about 5 centimeters thick. Just above the middle a carved groove about 2 centimeters wide and $2\frac{1}{2}$ to 3 millimeters deep encircles the blade; on one side it branches into two grooves, which have between them a small ridge about two centimeters wide and projecting 4 millimeters. I suspected, to be sure, that the described groove had served to fasten it to a handle, but was unable to obtain reliable information. The younger people apparently knew nothing about the matter, and the older ones supplied insufficient descriptions that I did not understand.

A few days later I visited the northeast tip of Bougainville, where I displayed the blades obtained in Buka. At first I was told that there were no such stone blades here. On the following day, however, they brought me a few blades that were quite different in shape from the Buka blades. I will describe one of these blades here: the entire length amounts to 28 centimeters. One end has a sharp and somewhat curved cutting edge $5\frac{1}{2}$ centimeters wide, and the other end is $6\frac{1}{2}$ centimeters wide and is ground down to a rather dull edge. The greatest width of the blade through the middle amounts to $7\frac{1}{2}$ centimeters, and its thickness about 6 centimeters: in cross section it is oval. The sides of the blade slope somewhat at both cutting edges, whereby the entire blade, which is ground smooth, acquires a light and elegant appearance. In the course of the day I acquired

several such articles. In order to become familiar with the lay of the land, 411
 I made a longer expedition on the following day into the interior, ac- 412 ●
 companied by a few natives whom I knew to be reliable. Two smaller 171
 villages, whose inhabitants all ran away, had already been passed when we
 arrived at a larger settlement, whose inhabitants -- probably relying on
 their superior numbers -- displayed sufficient courage to remain at home.
 A messenger sent out in advance had persuaded, if not the entire population,
 at least the male contingent to wait for me. I was received by a rather
 numerous force that was bristling with weapons, and who can describe my
 joy when I saw in the hands of a man who seemed to fill the office of a
Edun bura (chieftain) a real stone ax with its original binding. The rich
 gift that I exchanged for this splendid article, was of no small influence
 in initiating friendly relations. But despite the most enticing offers I did
 not succeed in obtaining further specimens of this type. A description of 411
 the highly singular binding of the bartered ax follows: about 14 centimeters 412
 from the sharp cutting edge a 78 centimeter long piece [26] of rattan is 171
 wound double around the blade. The two ends of the rattan are each 21 284
 centimeters long and twisted together to form the handle that stands at
 right angles to the blade. The middle part of the rattan, which is wound
 double around the blade, is narrowed considerably and wrapped with a fine
 rattan fiber; this wrapping extends about 4 centimeters down on the shaft
 and is most carefully woven in order to attach the blade sufficiently well
 to the handle. This was also apparently the purpose of two rattan strips
 that -- emanating from the parts of the rattan loop which lay along the
 two side edges of the ax -- crossed at the middle of the duller blade and
 are wound around the ax blade several times above and below the handle.
 The end of the handle is likewise firmly wrapped with rattan strips. The
 stone ax itself is covered with a shining black varnish, which also com-
 pletely covers the sharp cutting edge. The specimens I had obtained on
 the coast had no such varnish, and I later succeeded in acquiring only one
 more varnished blade without a handle. This varnish would immediately
 be scraped off if the ax were used as an artisan's tool. I therefore assumed
 that at least some of the stone axes are used as weapons, and subsequent
 statements of the natives confirmed this.

After I had seen the above-described method of binding, the sig-
 nificance of the groove on the Buka blades was absolutely clear. When I
 later showed my Bougainville ax in Buka, I was informed by older people
 that the binding of their blades had been done in almost exactly the same
 way.

When I visited these regions again in 1896, I again obtained a number of the above-mentioned blades and even a few with handles, but none with such a complete handle as the described specimen, which I can justifiably number among the truly splendid items of my collection. This time the trip extended also to Shortland and south Bougainville, and I succeeded in obtaining some similar stone axes as well as some quite new ones. It was on the Shortland Islands first of all that I obtained a few ax blades of a type previously unknown to me; for the greater part they were badly damaged, but for perfect specimens I was sent to the coastal villages of south Bougainville, which formerly had supplied Shortland with its needs. I then succeeded in bartering there for a large number of blades and some few specimens with the original handles. Specimens with handles seem already to be rather rare. The blades differ significantly in length: I obtained ones from 8 to 34 centimeters in length. I will describe one of the large ones in detail: the entire length amounts to 34 centimeters: the sharpened edge is $5\frac{1}{2}$ centimeters wide and semi-circular; the side which is turned outward when it is fastened is rather more convex than the surface turned toward the shaft. The blade tapers from the edge toward the back -- at first inconspicuously, but then more and more so until it ends in a conical point; it is polished very smooth. It is fastened to the wooden shaft, which is bent like a knee, by means of a 5 to 6 centimeter wide ring of woven rattan strips: this is done in such a way that the blade is wedged more and more firmly against the shaft at every blow. The people of the coast, who get these blades from the inhabitants of the Crown Prince Range, have imitated them in tridachna shell, but these imitations do not seem to be particularly common, and I obtained only a few specimens.

In the village of Taborol on the east side of Bougainville the coastal inhabitants brought me into contact with natives who live in the vicinity of the Gulnot Mountain. From these people also I enriched my collection to the extent of two ax blades, which deviate somewhat from the previously described ones. I will give a description of the larger of the two blades: the entire length amounts to 19 centimeters; the cutting edge is $9\frac{1}{2}$ centimeters wide and rather markedly curved; from the cutting edge the ax runs almost to a point; at the upper end, which is about $1\frac{3}{4}$ centimeters wide, there is a notch about 3 millimeters deep. When I asked the natives about the method of fastening it, it was explained that the handle had originally consisted of rattan that was wrapped around the blade and held fast

by other strips of rattan laid over the notch. It was not difficult to demonstrate the method with a piece of rattan. It is identical with the binding that I described from the Emperor Range. It seems accordingly that this method of fastening the ax blades is typical for middle Bougainville, north Bougainville, Buka and Nissan.

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[27] We find a similar mode of fastening the ax blades again in the French Islands, on Cape Villaumez and at the south cape of New Pomerania, but a description of these objects is outside the realm of my present purposes.

I believe that in the preceding material I have given an exhaustive description of all stone ax blades occurring in the northwestern Solomon Islands; in any case I nowhere succeeded--despite the most careful inquiry--in finding other types. In Bougainville the demand for iron axes is especially great, and in a few years stone axes will have fallen completely into disuse there; the chance that led to me a few stone blades in their original condition may not be so favorable to later travelers. This is my excuse for the somewhat longwinded explanation of how I succeeded in clarifying this highly interesting method of binding, which deviates so radically from all other types.

Although stone axes unquestionably were used also as weapons in hand-to-hand combat--and still are in the interior of Bougainville--it is beyond doubt that they served primarily as artisan's tools. In this capacity they have been replaced for the most part by iron tools today--even in the inland villages, which maintain active relations with the coastal inhabitants and procure their requirements there.

On the small islands at the northwest end of Bougainville I saw numerous rows of cyprina shells which are found in the mangrove swamps. They serve as a medium of exchange in commerce with the mountain people. The latter use them as cutting and scraping instruments when they are making arrows, spears, bows, etc. In certain spots I have seen sharpened boar's teeth used as scrapers in the manufacture of wooden objects. Special types of coral serve as rasps for planing wooden boards. Sharpened oyster shells, which formerly were used as knives, have now been almost completely replaced by knives.

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Whetstones of hard dark stone, which were formerly used for sharpening the stone blades, can be found everywhere; smaller whetstones made of a brown fine-grained stone--about the size of a hand--serve for sharpening smaller objects like fishhooks, etc.; today they are used for whetting knives and ax blades.

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This actually exhausts the catalog of tools. With these few implements people were able in former times to produce just as carefully wrought arrows and spears, just as carefully planed boards for boat building, as they can with modern and more refined tools. It is a very mistaken assumption that natives, after they have adopted our far better tools, also make progress in the perfection of the objects made with them. Rather, one could assert the opposite. I cannot recall a single case in which objects fashioned nowadays are closer to perfection than the ones stemming from the remote past. The newer products have not even remained on the same level, but show a marked decline over a period of time. In the northwestern Solomon Islands this decline is not yet especially noticeable, but in small things the practiced eye already sees a falling off from the old strict traditions. The wrapping of the spears with gay-colored bast fibers has already in certain places been replaced by wrapping with a gay-colored piece of cotton material; the carving of the boat prows is more carelessly executed than it was years ago, and I could cite a whole series of further examples. It is with justification that we today seek to assemble as far as possible in ethnographic museums the objects that are doomed to extinction; nevertheless it is necessary to make haste lest much be lost completely or represented by poor imitations.

Weapons

Concerning weapons in general see page 2 f. above.

a) Spears

First of all the spears draw our attention because they are distinguished by especially careful workmanship, and, in addition, can be numbered among the most dangerous weapons of the South Sea peoples. Best known in European museums is probably the spear that [28] is made in great numbers in the villages of the southern Crown Prince Range. From there it makes its way far to the south and to the north as a coveted article of trade. (1)

1. Cf. for example Guppy, The Solomon Islands, Plate between pages 74 and 75, Figure 2; H. L. Roth, IAE, Vol. XI, 155.